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Accepted for publication 27 September 1993.

Screening for genital *Chlamydia trachomatis* infection in female patients

Chlamydia trachomatis is a major sexually transmitted pathogen with consequent serious morbidity such as pelvic inflammatory disease, tubal occlusion, and infertility in women. The prevalence varies in different parts of the world.[1 2]

The usual site chosen to screen for this pathogen is the cervix.[3 4] In our clinic, the urethra and the cervix are also tested. We report the findings from our Department of Genitourinary Medicine in Sunderland, Tyne and Wear, United Kingdom.

Between the period of 1 January 1991 and 31 December 1991, 1461 women were screened (for sexually transmitted diseases). The ELISA method (Chlamydiazyme) was used in screening for *Chlamydia trachomatis*, while Gram stain and culture were used for the detection of gonorrhoea.

The results in the table show that 116 patients were positive for *Chlamydia trachomatis*, 22 were positive for *N gonorrhoea* while five patients had both conditions. Among the 11 patients with only urethral *Chlamydia trachomatis* eight (72%) were asymptomatic.

Infection of the female urethra by *Chlamydia trachomatis* has been previously reported.[5 6] The female urethra is about 4 cm long and various ducts open into its lumen. Of particular importance are the ducts of Skenes glands and ducts which are lined by columnar epithelium.

The positive yield of *Chlamydia trachomatis* from the urethra alone in our clinic is 9·5%. The implications of this result are threefold. First, colonisation of the female urethra by *Chlamydia trachomatis* may contribute to some patients being diagnosed with female urethral syndrome. In this condition, the patient has increased frequency of micturition, dysuria, but no significant bacteriuria. It is advisable to exclude *Chlamydia trachomatis* from the urethra of such patients. Secondly, the urethra may serve as a reservoir of infection despite a negative result from the cervix. The infection may subsequently be transmitted to the male partner. Thirdly, failure to screen the urethra may be responsible for some patients whose symptoms persist, despite negative results.

We recommend that the urethra be screened for *Chlamydia trachomatis*.

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Number of patients with positive findings from different sites

Location	*Chlamydia* n = 116 %	*Gonorrhoea* n = 22 %	*p Value*
1 Urethra only	11 (9·5)	1 (4·5)	—
2 Cervix only	70 (60·3)	6 (27·3)	p < 0·05
3 Urethra and cervix	35 (30·2)	11 (50)	—
4 Cervical involvement (2 + 3)	105 (90·5)	18 (81·8)	—
5 Urethral involvement (1 + 3)	46 (39·7)	14 (63·6)	—
6 Rectal involvement	—	7 (31·8)	—
7 Pharyngeal involvement	—	3 (13·6)	—

Among the 11 patients with urethral chlamydia alone, 8 (72%) were asymptomatic.

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Accepted for publication 12 October 1993

HIV seroprevalence among eunuchs

Eunuchs (hijras) and their existence is well described in ancient Indian texts.[1] In India, hijras are seen as a "third gender" role which is neither male nor female but contains elements of both. He is an intersexed impotent man

who undergoes emasculation—a view well documented in Hinduism.[2] Originally they were boys either sold by their poor parents or kidnapped. Subsequently they were castrated, set up as beggars and used as money making machines.

Eunuchs do not develop a desire for sexual activity, directed towards males, but they may be used or pushed into homosexual prostitution as an economic necessity and at some stage of their life they become homosexuals. The adult life of a Hijra is as a male homosexual prostitute playing a passive recipient role and homosexual prostitution in them is said to be institutionalised.[3] In India, the incidence of HIV infection among homosexuals is reported to be 0·3%.[4] Hence the present study was undertaken to know the incidence of HIV infection among eunuchs.

Serum samples were collected from 100 eunuchs aged 20 to 35 years and tested for the presence of HIV antibodies by ELISA test. Repeatedly ELISA positive sera were sent to the AIDS Reference Centre, CMC, Vellore, for confirmatory Western Blot (WB) tests. Out of 100 sera tested five were positive for HIV antibodies, the seropositivity rate being 5%. Hijras act as passive partners, and are likely to have multiple partners, even multiple sexual acts a day. As such they are more prone to acquire HIV infection and the higher incidence noticed in the present study is corroborative.

We thank the Indian Council of Medical Research for their financial assistance and the Director, AIDS Reference Centre, CMC, Vellore, for performing WB tests. Thanks are also due to Dr KV Ramaraju, Professor and Head and Dr Arjun Prasad, Department of STD, RMC, Kakinada, for their help.

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